

Frequency of target organs by mutagenicity in *Salmonella* for 564 carcinogens in rats and 442 carcinogens in mice in the Carcinogenic Potency Database.

Target Organ	Chemicals evaluated as carcinogenic in:									
	Rats					Mice				
	All Chemicals <sup>a</sup> (N= 564) <sup>b</sup>	Mutagens (N= 226)	Nonmutagens (N=147)			All Chemicals <sup>a</sup> (N=442) <sup>b</sup>	Mutagens (N=192)	Nonmutagens (N=143)		
Liver	222 (40%)	91 (40%)	47 (32%)			254 (57%)	102 (53%)	103 (72%)		
Lung	58 (10%)	31 (14%)	5 (3%)			121 (27%)	58 (30%)	24 (17%)		
Mammary gland	107 (19%)	60 (27%)	16 (11%)			22 (5%)	12 (6%)	7 (5%)		
Kidney	94 (17%)	33 (15%)	43 (29%)			27 (6%)	12 (6%)	11 (8%)		
Stomach	88 (16%)	48 (21%)	11 (7%)			69 (16%)	37 (19%)	17 (12%)		
Vascular system	33 (6%)	21 (9%)	2 (1%)			64 (14%)	37 (19%)	14 (10%)		
Hematopoietic system	57 (10%)	29 (13%)	17 (12%)			54 (12%)	23 (12%)	18 (13%)		
Urinary bladder	52 (9%)	26 (12%)	17 (12%)			12 (3%)	8 (4%)	1		
Nasal cavity/ turbinates	50 (9%)	19 (8%)	10 (7%)			6 (1%)	6 (3%)			
Ear/Zymbal's gland	42 (7%)	33 (15%)	1			3	1	2 (1%)		
Esophagus	37 (7%)	15 (7%)	1			8 (2%)	5 (3%)	1		
Skin	35 (6%)	23 (10%)	5 (3%)			3	3 (2%)			
Thyroid gland	37 (7%)	14 (6%)	15 (10%)			21 (5%)	11 (6%)	10 (7%)		
Oral cavity	34 (6%)	19 (8%)	8 (5%)			4	3 (2%)	1		
Large intestine	32 (6%)	23 (10%)	1			3		2 (1%)		
Small intestine	29 (5%)	20 (9%)	2 (1%)			6 (1%)	4 (2%)	1		
Uterus	26 (5%)	11 (5%)	6 (4%)			12 (3%)	8 (4%)	3 (2%)		
Pancreas	26 (5%)	9 (4%)	9 (6%)							
Peritoneal cavity	27 (5%)	15 (7%)	8 (5%)			8 (2%)	3 (2%)	1		
Central nervous system	21 (4%)	14 (6%)	2 (1%)			3	2 (1%)	1		
Harderian gland						22 (5%)	11 (6%)	9 (6%)		
Clitoral/preputial gland	22 (4%)	16 (7%)	5 (3%)			11 (2%)	3 (2%)	2 (1%)		
Testis	22 (4%)	8 (4%)	6 (4%)			4		2 (1%)		
Adrenal gland	18 (3%)	7 (3%)	7 (5%)			8 (2%)	3 (2%)	5 (3%)		
Subcutaneous tissue	15 (3%)	11 (5%)	3			5 (1%)	3 (2%)	1		
Ovary						10 (2%)	4 (2%)	5 (3%)		
Pituitary gland	7 (1%)	2	4 (3%)			8 (2%)	2 (1%)	4 (3%)		
Spleen	7 (1%)	4 (2%)	2 (1%)							
Bone	5	2	1							
Prostate	4	1	1							
Gall bladder						4				
Vagina	2	2				1	1			
Myocardium						2		1		
Mesovarium	2									

<sup>a</sup> In the CPDB 768 chemicals are evaluated by a published author as having induced tumors at a particular target site; however, mutagenicity in *Salmonella* is included in the CPDB for only 502 of them. The column "All Chemicals" reports results for all carcinogens in each species, whether mutagenicity results are available or not. A chemical is classified as mutagenic in the *Salmonella* assay if it was evaluated as either "mutagenic" or

“weakly mutagenic” by Zeiger (Gold and Zeiger, eds., *Handbook of Carcinogenic Potency and Genotoxicity Databases*, CRC Press, 1997, pp. 687-729; Zeiger, pers. comm.) or as “positive” by the Gene-Tox Program (Kier *et al.*, *Mutat. Res.* 168: 69-240, 1986; Auletta, pers. comm.). Other chemicals evaluated for mutagenicity by these two sources are reported as non-mutagens.

<sup>b</sup> % = Percentage of rat carcinogens or mouse carcinogens that induce tumors at the given site. Many chemicals induce tumors at more than one site, and these are counted at each relevant target site. Therefore, many chemicals are counted more than once, and percentages cannot be added. For example, of 222 chemicals that induce liver tumors in rats, 138 (62%) are positive in at least one other site in rats.